# Financing Stormwater Management and Incentivizing Green Infrastructure

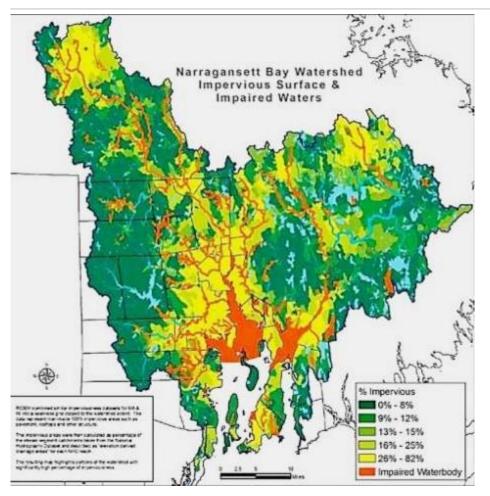
Sheila Dormody, Providence Metro Program Manager, The Nature Conservancy Fred Presley, Town Manager, West Warwick

## Rain v. Stormwater

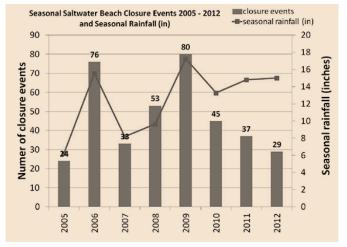




## Pavement and water quality impairment



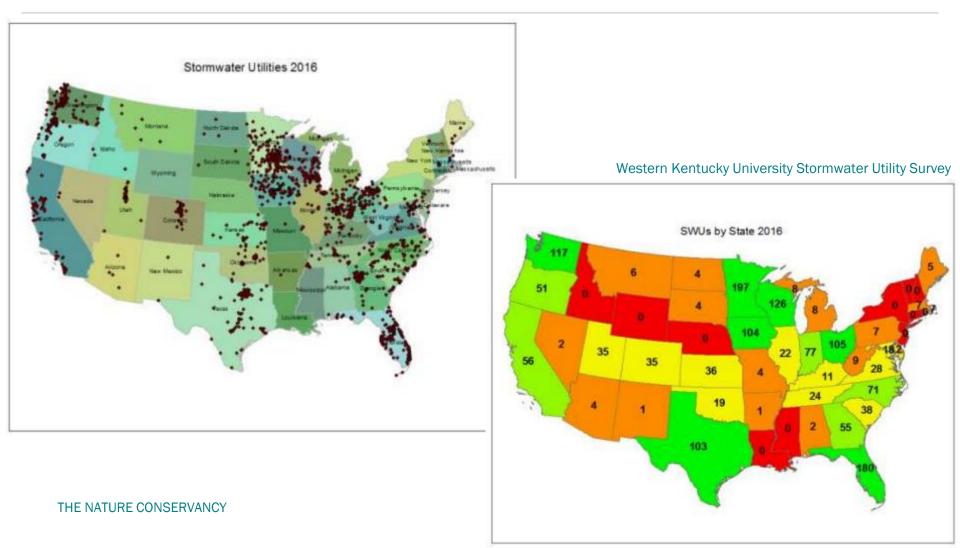




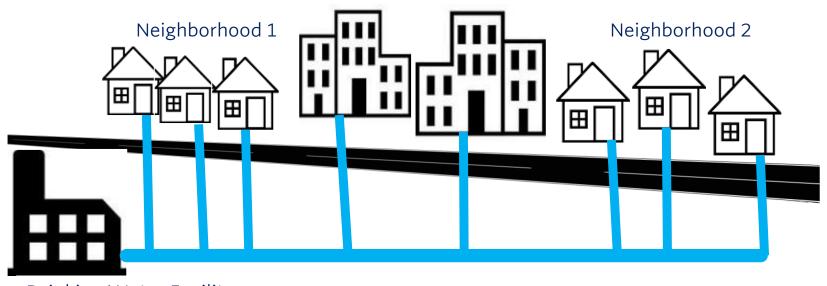
### Stormwater challenges for municipalities



#### Stormwater management districts across the United States



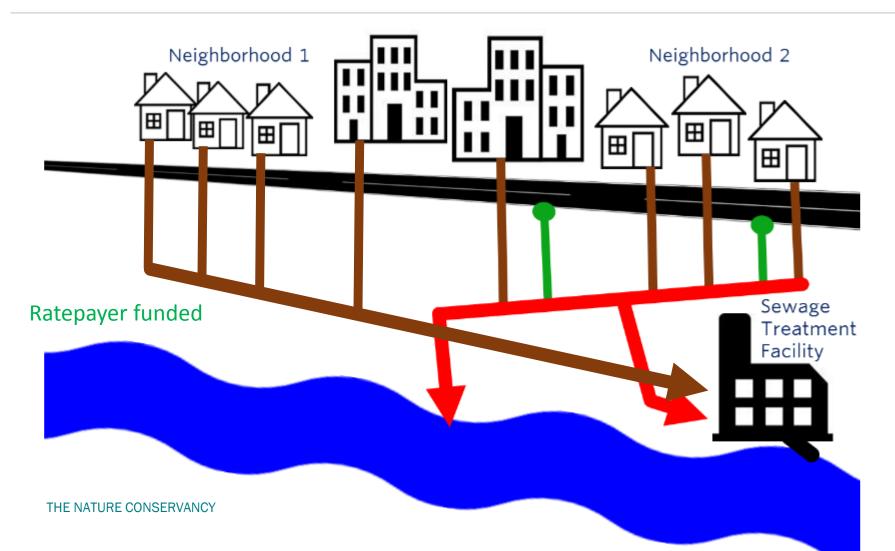
#### How other utilities are funded



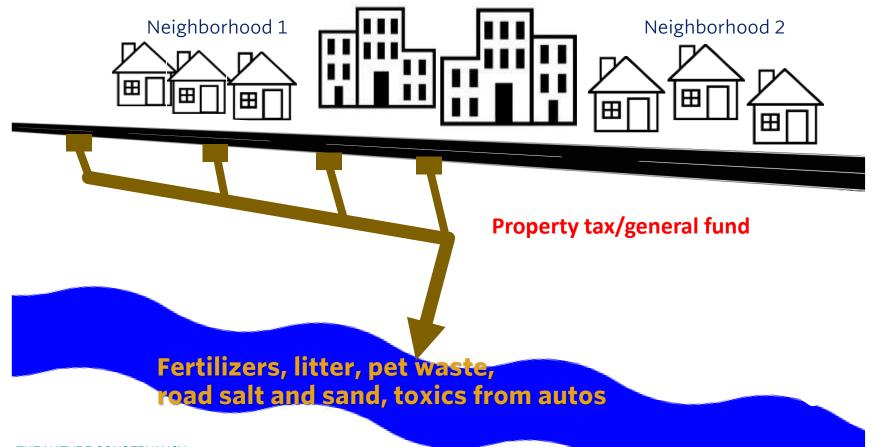
Drinking Water Facility

Ratepayer funded

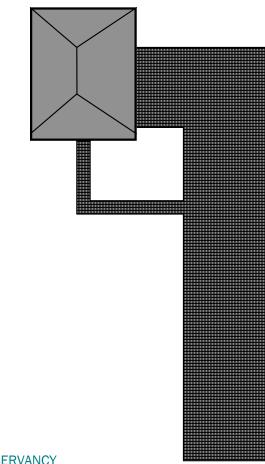
#### How other utilities are funded



#### Stormwater infrastructure looks similar



#### **Stormwater Management Districts**



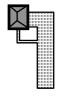
# How a Fee is Calculated

Average paved surface of a typical residential property equals the billing unit:

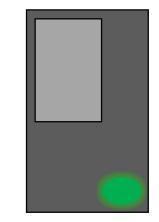
1 Equivalent Residential Unit (ERU)

### **Stormwater Management Districts**

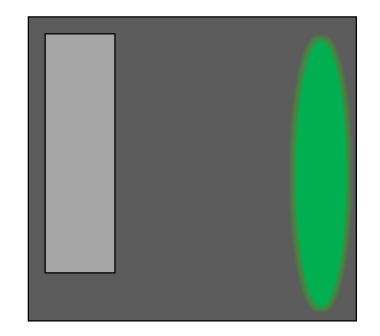
# **Multiplying Equivalent Residential Units**



#### 2000 s.f. = 1 ERU \$5/mo.



20,000 s.f. = 10 ERUs \$50/mo. less credit



400,000 s.f. = 200 ERUs \$1,000/mo. less credit

#### **Benefits of Stormwater Utilities**

- Stable
- Adequate
- Flexible
- Equitable



#### What stormwater management districts fund



Infrastructure upgrades, operations & maintenance

THE NATURE CONSERVANCY

#### Green infrastructure incentives

## **Green infrastructure incentives**









## Middletown stormwater management





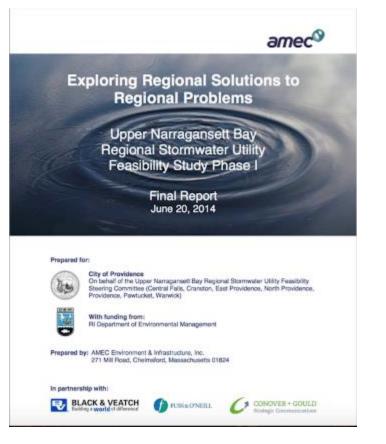
## Upper Narragansett Bay Regional Feasibility Study

# Benefits of A Regional Approach to Stormwater Management

- Address Cause of Flooding Problems
- Improve Water Quality
- No Need for Individual Specialized Resources
- Interconnected Infrastructure



### Upper Narragansett Bay Regional Feasibility Study



- 1. We have real, growing, shared and unresolved stormwater problems
- 2. We can solve these problems and there will be tangible benefits
- 3. It will cost more than we are now spending
- 4. It will be more efficient and effective doing so together as a region
- 5. A stormwater user fee is the best and fairest way to pay for the improvements

www.unbstormwater.org

#### **RI** Green Infrastructure Coalition

#### **Coalition Leadership**

- Audubon Society of Rhode Island
- **Clean Water Fund**
- Save The Bay
- The Nature Conservancy
- The Trust for Public Land

#### The GIC is also supported by:

- **RI Coastal Resources Management Council**
- **RI** Department of Environmental Management
- **RI** Department of Health
- **City of Newport**
- **City of Pawtucket**
- **City of Providence**
- **RI Infrastructure Bank**
- Town of Middletown

Aguidneck Land Trust Birchwood Designs

**Other Partners** 

- Blackstone Parks Conservancy
- Blackstone River Coalition
- Clean Ocean Access
- **Conservation Law Foundation**
- Emerald Cities Providence
- ESS Group, Inc.
- FILARSKI/Architecture+Planning+Research

Aquidneck Island Planning Commission

- Friends of the Moshassuck
- Green & Healthy Homes Initiative
- Grow Smart RI
- Groundwork Providence
- Mass Audubon
- Narragansett Bay Research Reserve
- Newport Restoration Foundation
- American Society of Landscape Architects, Rhode Island Chapter
- RI Builders Association
- RI Nursery and Landscape Association
- Save The Lakes
- Sierra Club
- U.S. Green Building Council Rhode Island Chapter
- UPP Arts
- University of Rhode Island Coastal Resources Center/SeaGrant
- Woonasquatucket River Watershed Council

### URBAN WATER | PROVIDENCE, RI

#### 2. Building Green Infrastructure into Neighborhoods and Creating Jobs

#### 1. Mapping Opportunities and Engaging the Community



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#### 3. Building the Constituency for a Systemic Approach



4. Institutionalizing Nature Based Solutions at City and State Levels

#### Get involved



#### RI Green Infrastructure Coalition www.greeninfrastructureri.org

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